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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/190,207	11/13/1998	JIASHU CHEN	CHEN-4	6396

7590 09/25/2003

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EXAMINER

NGUYEN, DUC MINH

ART UNIT PAPER NUMBER

2643

DATE MAILED: 09/25/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	Application No.	Applicant(s)
	09/190,207 Examiner Duc Nguyen	CHEN, JIASHU Art Unit 2643
<b>--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</b>		

THE REPLY FILED FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

a)  The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
 b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
 ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.  
 2.  The proposed amendment(s) will not be entered because:  
 (a)  they raise new issues that would require further consideration and/or search (see NOTE below);  
 (b)  they raise the issue of new matter (see Note below);  
 (c)  they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d)  they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_.

3.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 4.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached sheet.  
 6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.  
 7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-12.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8.  The proposed drawing correction filed on \_\_\_\_\_ is a) approved or b) disapproved by the Examiner.  
 9.  Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.  
 10.  Other: \_\_\_\_\_



Duc Nguyen  
Primary Examiner  
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***Response to Arguments***

In response to applicant's arguments on page 6 of the amendment regarding the use of inherency. It is noted that page 8 of the office action is labeled as **Response to Arguments**. The examiner does not use the word "inherent(ly)" (emphasis added) in the body of the 103 rejection. Response to applicant's argument is not considered as part of the 103 rejection. Abel clearly teaches a time domain HRTF model for use with 3D sound applications, comprising a filters (imaging filter 15, fig. 1 or imaging filter 15', fig. 9); spatial characteristic functions (HRTF table 11, fig. 1 or weight table 31, fig. 9; col. 2, ln. 10-30; col. 9, ln. 20-37) derived from time domain HRTF (col. 4, ln. 41-43; col. 6, ln. 23-25; col. 8, ln. 59-65) and adaptively combined with the filter (imaging filter 15, 15'). Abel also teaches that his invention can be used with any type of filters (col. 4, ln. 52-65). Abel further teaches that raw HRTF can be in the time domain or frequency domain form (see fig. 3b-d, HRTFs in time domain form, e.g., amplitude versus time; fig. 5a-b, HRTFs are either in time domain or frequency domain, e.g., amplitude versus time or amplitude versus frequency, respectively). Able also discloses a plurality of spatial characteristic functions derived from time domain head-related transfer functions (see fig. 1 and 9, spatialized output are derived from the raw HRTFs; col. 2, ln. 10-30; col. 9, ln. 20-64). Able further teaches the use of FIR, IIR filters (finite and infinite impulse response filters). Noted that FIR and IIR filter are realized in time domain (e.g., the term "impulse response" is used for the description in a time domain.)

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In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, Able teaches deriving spatial characteristic functions from time domain HRTF. Chen teaches deriving spatial characteristic functions from frequency domain HRTF. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Abel into the teachings of Chen in order to provide faster processing time, since implementations and operation on frequency domain transfer functions are often slow (the use of FFT and IFFT).

  
**DUC NGUYEN**  
PRIMARY EXAMINER